wise direction, as described in connection with spool 48.

A roller 56 is rotatably mounted as on a shaft 58 of a machine or hand tool. The roller 56 is preferably surfaced with a cylinder 59 of resilient material, such as rubber or similar material.

A suitable cement composition 30 is applied to the surface 35 prior to application of the tapes 52 and 55. One that has been used in practice is made up of one part polyisobutylene and four parts steam blown asphalt. Other adhesive materials can, however, be used satisfactorily.

In accordance with this invention, the adhesive mixture 30 is pre-heated to a desired temperature and fluidity by means (not shown) prior to application on the surface 35. After the adhesive mixture is properly liquified, a valve as illustrated at 79 is opened, so that the adhesive mixture 30 discharges through line 82 and nozzle 83 onto a surface indicated at 35. At the same time, hot gases as from an engine (not shown) and other hot flue gases as from a burner (not shown) are discharged to the surface 35 through the exhaust pipe 37. Additional heat is preferably supplied to the surface 35 by means of the torch 47, fired by liquified gas, as previously described.

As the adhesive mixture 30 strikes the paved surface 35, a rotating brush 29 is preferably used to evenly distribute the adhesive mixture over the paved surface as between a pair of splash plates 84, illustrated in broken lines, to form a continuous stripe of adhesive material in front of roller 56. The width of the applied stripe of adhesive material is determined by the distance between adjustably mounted splash plates 84 in the event such plates are used. The roller 56 is brought above the resulting adhesive stripe. Opaque tape 52 and transparent tape 55 are partially unrolled and strips thereof are brought into superimposed relationship with respect to each other so that the opaque tape 52 is on top of the transparent tape 55 and equally spaced from both sides of the transparent tape. The resulting strip of double tape is fed over the surface of roller cylinder 59. The strip of double tape is forced by the roller 56 onto the continuously produced adhesive stripe 30 with the opaque tape 52 in contact with the adhesive material 30 and the transparent tape 55 overlying the opaque tape 52. The opaque tape 52 adheres to the adhesive cement stripe 30.

Some of the adhesive material 30 is forced out from beneath the opaque tape 52 and beyond the edges thereof by pressure applied to the roller 56. The transparent tape 55 is made of greater width than opaque tape 52, and covers the adhesive material 30 forced to the sides of the applied opaque tape stripe as it is forced from beneath the opaque tape. The greater width of the transparent tape 55 thus protects roller 56 from the adhesive cement. In this manner the roller 56 does not pick up any of the cement 30 and does not, therefore, become covered with sticky material and adhering dirt and debris. At the same time, the transparent tape 55 is cemented at its sides to the adhesive material 30 squeezed out from beneath the applied opaque tape 52.

The net result of this operation is that a neat stripe of opaque tape 52 is continuously laid down over the adhesive stripe 30 and a protective transparent strip of tape 55 is continuously attached or cemented at its overlapping edges to the pavement surface 35 above the opaque tape 52 by cement forced to the sides of the opaque tape. The transparent tape 55 gives effective temporary protection to the opaque tape 52 from traffic wear and tear during the period of time in which the adhesive material 30 is cooling and setting. The transparent tape 55 also prevents the adhesive material that has been squeezed beyond the edges of the opaque tape from being smeared over the exposed surface of the applied opaque tape 52 stripe by the action of passing traffic, causing defacement of the stripe similar to that which often occurs in the case of freshly applied painted stripes.

Moisture and condensation, such as rain, snow and dew cause the transparent tape to shrink and rupture. During this process, the transparent tape 55 becomes detached from above the opaque tape 52. In a relatively short time, usually after several days, weathering and wear of the tape will cause complete detachment of the transparent tape 55, and the opaque tape 52 will remain as a permanent marking strip securely attached to the pavement or smooth surface 35. The effectiveness of the opaque tape as a permanent traffic marker, or other marker, is not in the least impaired by the temporary use of the transparent tape as a shield.

Opaque tapes of a wide variety of materials and of different colors can be used. Thus the opaque tape can be made of a wide variety of synthetic plastic materials, fabrics of natural or man-made fibers or threads such as synthetic fibers, glass, asbestos, metals, and the like. An opaque tape that has given satisfactory results in practice is made up of two parts polyvinyl chloride resin, one part plasticiser consisting of diisooctyl phthalate, and one part of a suitable pulverized filler, such as clay. The plasticiser serves the purpose of resisting weathering due to sunlight, and extremes of temperature and moisture. The plasticiser used in the mixture has been found not to migrate under extreme variations in weather conditions. The transparent tape can be made of any relatively inexpensive transparent material such as regenerated cellulose or cellophane, polyethylene, and similar materials.

After a strip of tape of desired length has been applied, the superimposed tape is conveniently cut by means not shown.

The foregoing description is primarily for explanatory purposes, and is given to illustrate a specific embodiment of the invention. It is understood that many variations in the structure, design and arrangement of the various elements of the stripe application apparatus will occur to one skilled in the art. Accordingly, it is understood that such changes and modifications of the invention illustrated and described above may be made within the scope of the appended claims without departing from the spirit of the invention.

What is claimed is:

1. A method for applying a marking stripe to a surface, comprising: continuously applying to said surface a stripe of settable plastic adhesive material, said material being flowable under pressure at the time of its application; continuously superimposing an opaque tape of uniform width and a transparent tape wider than said opaque tape with both edges of said transparent tape extending substantially beyond the edges of said opaque tape; and pressing the superimposed tapes upon said stripe of adhesive material with the opaque tape lowermost, said stripe of adhesive material being of sufficient width and thickness that the entire surface of said opaque tape is secured to said first surface and said transparent tape is temporarily secured over said opaque tape by adhesive material squeezed from beneath said opaque tape.

2. A method for applying a marking stripe to a paved surface, comprising: continuously applying to said surface a stripe of settable plastic adhesive material of uniform width, said material being flowable under pressure at the time of its application; continuously superimposing an opaque tape of approximately the same width as said adhesive stripe and a transparent tape wider than said opaque tape with both edges of said transparent tape extending substantially beyond the edges of said opaque tape; and pressing the superimposed tapes upon said stripe of adhesive material with said opaque tape lowermost, said stripe of adhesive material being of sufficient width and thickness that the entire lower surface of said opaque tape is secured to said paved surface and said transparent tape is temporarily secured over said opaque tape by adhesive material squeezed from beneath said opaque tape.

3. The process of claim 2 wherein said adhesive material is a molten thermoplastic adhesive.